

**BY ORDER OF THE COMMANDER  
AIR EDUCATION AND TRAINING  
COMMAND**

**AF INSTRUCTION 11-418**

**AIR EDUCATION AND TRAINING COMMAND**



**Supplement 1**

**11 JULY 2003**

**Flying Operations**

**OPERATIONS SUPERVISION**

**COMPLIANCE WITH THIS PUBLICATION IS MANDATORY**

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OPR: HQ AETC/DOFV (Mr Don Graham)  
Supersedes AFI 11-418/AETC Sup 1, 12 July 2001

Certified by: HQ AETC/DOF (Lt Col C. Johnson)  
Pages: 19  
Distribution: F

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**AFI 11-418, 1 March 2002, is supplemented as follows:**

Submit suggested improvements to this instruction on AF Form 847, **Recommendation for Change of Publication**, through local standardization/evaluation (stan/eval) channels to HQ AETC/DOF, 1 F Street Suite 2, Randolph AFB TX 78150-4325. Maintain and dispose of records created as a result of prescribed processes in accordance with AFMAN 37-139, *Records Disposition Schedule*. This supplement does not apply to Air National Guard and Air Force Reserve Command units.

**SUMMARY OF REVISIONS**

This revision clarifies applicability to 479 FTG and 336 TRG (paragraph 1); removes the OG/CC option of allowing flight commanders who have not been properly trained and certified to perform operations supervisor duties (paragraph 2.2); adds Operations Supervisor location requirement for actual search-and-rescue operations (paragraph 3); defines T-1, T-6, T-37, and T-38 aircraft as fighter aircraft for the purposes of Table 1 requirements (paragraph 3); defines deployed operations (paragraph 3.1.6); adds an OG/CC-appointed SOF program manager position with associated duties and responsibilities (paragraph 4.1.5 [Added][AETC]); adds a face-to-face interview with the OG/CC to the SOF certification process (paragraph 4.1.7 [Added][AETC]); adds several tasks to the opening SOF duties (paragraph 4.2.1.1); adds requirement for SOFs to ensure ATIS reflects all relevant local flying information and that airborne aircrews are notified of status changes that may affect recovery fuel (paragraph 4.2.7); adds several items to the list of operations supervisor duties in paragraph 4.3; adds requirement for the SOF program manager to work with SOF liaison officers in each squadron (paragraph 4.5.8); adds T-38 supervised solo requirements (paragraph 5.6.1); changes SOF currency to 45 days with new guidance added for recurrency (paragraph 13); adds guidance to include aircraft and simulator sorties in all assigned aircraft to SOF training whenever practical (paragraph 14.6); deletes requirement for flight commanders to attend an AETC training program; adds search-and-rescue operations to Table A2.1; updates wind chill

information to reflect current meteorological guidance (Attachment 7 [Added][AETC]); and updates AETC SOF telephone numbers (Attachment 8 [Added][AETC]). A star (★) indicates revision from the previous edition.

★1. For the 479 Flying Training Group (FTG), operations group commander (OG/CC) and wing commander (WG/CC) refer to the FTG/CC. For the 336 Training Group (TRG), OG/CC and WG/CC refer to the TRG/CC.

2.1. The 58 OG/CC, 97 OG/CC, 314 OG/CC, and 336 TRG/CC will determine if a wing supervisor of flying (SOF) is required. In these units, if a SOF is not used, either the operations supervisor (Ops Sup) or a duty officer will be on duty in the squadron to handle squadron-unique issues.

★2.2. The Ops Sup is the focal point for decisions affecting all squadron flying operations and will ensure flying operations comply with all applicable directives. Before a flight commander assumes Ops Sup duties, the squadron commander will nominate the individual to the OG/CC in writing. The OG/CC will establish a training program for flight commanders selected for Ops Sup duties. Once training is complete, the OG/CC will certify the flight commander, in writing, before the individual can perform Ops Sup duties. When the number of aircraft involved is very small (less than five) and flights occur over a short duration, the OG/CC may, by exception, authorize combining the Ops Sup and the SOF.

★3. Actual search-and-rescue operations require the Ops Sup location to be the squadron. **NOTE:** For Table 1, consider T-1, T-6, T-37, and T-38 aircraft as fighter aircraft.

★3.1.6. Deployed operations are defined as five or more aircraft away from home station with the intent to accomplish multiple syllabus-directed sorties from the same location.

★4.1.5. (Added)(AETC) Appoint, in writing, a SOF program manager at the OGV level. Maintain the appointment memorandum in the program manager's training folder. **NOTE:** The OGV SOF program manager will be a current SOF.

4.1.6. (Added)(AETC) Review the qualifications of all candidates before the candidates enter into the SOF program.

★4.1.7. (Added)(AETC) Certify the minimum number of SOFs necessary to safely accomplish the mission. Certification will include a face-to-face interview. Accomplish and document certification before the candidate performs SOF duty. Maintain the nomination and certification memorandum in the candidate's training folder.

4.1.8. (Added)(AETC) (*Airlift, tanker, and special operations/rescue units only*) For units that have elected to not have a SOF, include guidance in unit supplements on which SOF functions in the basic instruction and this supplement need to be performed by other agencies or duty positions.

4.1.9. (Added)(AETC) Ensure adequate means are employed to counter the adverse effects of temperature extremes on crewmembers for airlift, tanker, and special operations/rescue aircraft that require extended ground preparation.

★4.2.1.1. (Added)(AETC) Complete the SOF opening, changeover, and closing checklists. As a minimum, opening SOFs will:

4.2.1.1.1. (Added)(AETC) Complete all squadron go/no-go checklist items before reporting to the tower.

4.2.1.1.2. (Added)(AETC) Review and initial quarterly meeting minutes before reporting to the tower.

4.2.1.1.3. (Added)(AETC) Adequately evaluate current and forecast weather conditions, to include

current observations, forecasts, watches, warnings/advisories, and significant changes expected.

4.2.1.1.4. (Added)(AETC) Verify status of home field runways, navigational facilities, and bird conditions.

4.2.1.1.5. (Added)(AETC) Review notices to airmen (NOTAM).

4.2.1.1.6. (Added)(AETC) Check communications to confirm the operability of hot lines and radios, etc.

4.2.1.1.7. (Added)(AETC) Comply with all local reporting requirements regarding emergency aircraft.

4.2.1.2. (Added)(AETC) Contact squadron Ops Sups and clarify any special requirements (initial solo, solo out-and-back, flight evaluations, air refueling, airdrops, etc.).

4.2.4. For specialized undergraduate pilot training (SUPT), joint primary pilot training (JPPT), Euro-Nato joint jet pilot training (ENJJPT), and pilot instructor training (PIT), the SOF will establish a home and auxiliary field status (to include an alternate [if required]), 1 hour before the first scheduled launch.

4.2.5. When required, designate an aircraft to fly chase. Refer to the checklist at Attachment 2, basic publication, for additional information.

★4.2.7. Additionally, closely monitor the status of the runways and navigational facilities serving the home field, auxiliary fields, ranges, drop zones, etc. Designate alternate airfields (if required). Notify local aircraft through the tower watch supervisor, Air Route Traffic Control Center (ARTCC), or Air National Guard (if necessary) of any status changes that may affect recovery fuel. Ensure Automatic Terminal Information Service (ATIS) reflects all relevant local flying information.

4.2.9. (Added)(AETC) Maintain a SOF log for recording significant actions and events.

4.2.10. (Added)(AETC) Advise aircrews of extreme environmental temperatures and ensure flying activities comply with procedures governing operations under extreme heat and cold (Attachment 6 [Added][AETC] and Attachment 7 [Added][AETC]).

4.2.11. (Added)(AETC) Take action to locate any overdue aircraft.

4.2.12. (Added)(AETC) Brief the replacement SOF on the current situation. Do not change SOFs when an emergency is in progress.

4.3.6. (Added)(AETC) Satisfy all crew rest requirements and be on duty 1 hour before first takeoff. Duty day will not exceed 12 hours unless waived by the OG/CC.

4.3.7. (Added)(AETC) Complete all squadron go/no-go checklist items.

4.3.8. (Added)(AETC) Check weather, to include current observations, forecasts, watches, warnings/advisories, significant changes expected, and NOTAMs.

4.3.9. (Added)(AETC) Ensure all flying-related information displayed at the operations counter (airfield and pattern status, barrier position [if applicable], takeoff and landing data [except airlift, special operations/rescue, and tanker units], index of thermal stress [ITS] and chill index, current and forecast weather data, and any other information deemed necessary for mission accomplishment), is current. Update SOF as required.

4.3.10. (Added)(AETC) Ensure the SOF is familiar with any special requirements (initial solo, solo out-and-back, air refueling, airdrops, etc.) for that day.

4.3.11. (Added)(AETC) Notify the runway supervisory unit (RSU) of special flying requirements (for example, initial solos, Commanders Awareness Program students, solo out-and-back, flight evaluations, etc.).

4.3.12. (Added)(AETC) Monitor SOF radio frequency.

4.3.13. (Added)(AETC) Verify scheduled aircrews have accomplished all required currency items. Additionally, ensure currency of those scheduled to perform all currency-based ground duties (RSU, SOF, etc.).

4.3.14. (Added)(AETC) In conjunction with the aircrew, deconflict entry and exit times on all local area low-level routes. Use all available resources (such as Avian Hazard Advisory System [AHAS] and bird avoidance model [BAM]) to minimize the risk of bird strikes to low-level aircrew.

4.5. (Added)(AETC) SOF program manager will:

4.5.1. (Added)(AETC) Determine and maintain the minimum number of individuals required to safely accomplish SOF duties. As a minimum, this calculation will include the length of the daily flying window, number of tours per day, number of tours per type aircraft/squadron, equitable distribution of tours, and currency requirements.

4.5.2. (Added)(AETC) Maintain SOF currency.

4.5.3. (Added)(AETC) Answer directly to the OG/CC for training, certification, scheduling, execution, and maintenance of the program.

4.5.4. (Added)(AETC) Verify SOF candidates complete all required training and receive OG/CC certification before performing SOF duties.

4.5.5. (Added)(AETC) Develop and administer the SOF qualification test. This is a controlled test of at least 25 questions. Annually review and update (as needed) the SOF qualification test.

4.5.6. (Added)(AETC) Conduct quarterly SOF meetings. Develop a process to ensure all absentees review the meeting minutes before reporting to the tower for SOF duty.

4.5.7. (Added)(AETC) Implement and maintain a SOF information/read file. Develop a process to ensure all SOFs review the information/read file before performing SOF duty.

★4.5.8. (Added)(AETC) Designate primary and alternate SOF liaison officers in each squadron.

4.6. (Added)(AETC) SOF liaison officers will:

4.6.1. (Added)(AETC) Ensure all SOF upgrade tours are conducted under the supervision of an experienced SOF. **NOTE:** Experienced SOFs must have 6 months of SOF experience (or have accomplished 10 tours) in the current duty assignment

4.6.2. (Added)(AETC) Perform duties assigned by the SOF program manager.

5.4. Squadron commanders will nominate the minimum number of SOF candidates necessary to safely accomplish the mission.

5.6. (Added)(AETC) As required by AETCI 11-204, *Runway Supervisory Unit (RSU) Operations*, the RSU controller (SUPT only) and crew closely supervise solo student operations and ensure safe and efficient traffic pattern operations. RSU controllers provide senior supervisors with an additional quality check of traffic patterns and landings. They work directly with the SOF to resolve emergency situations safely. Refer to AETCI 11-204, Table 2.1, for guidance on T-38 supervised solo out-and-backs.

5.7. (Added)(AETC) During flying operations, the squadron duty desk is the focal point for information and scheduling execution. Operations resource management specialists (or other knowledgeable personnel) certified in duty desk procedures by the squadron operations officer will occupy the desk as specified in the local supplement. Attachment 8 (Added)(AETC) lists SOF telephone numbers for

AETC bases. Attachment 9 (Added)(AETC) lists typical squadron duty desk equipment.

5.8. (Added)(AETC) The flight commander is the first echelon of command responsible for safely and efficiently scheduling people, missions, and aircraft. The flight commander must know the capabilities and experience levels of all flight members and ensure they fly the right mission at the right time according to the current syllabus and applicable directives. Safety must remain paramount in the flight commander's mind. Flight commanders will also keep the Ops Sup informed of the training plan and any changes.

5.9. (Added)(AETC) Each wing will develop and execute a flight commander training program. Flight commanders must receive this training before assuming flight commander duties. See Attachment 10 (Added)(AETC) for the minimum requirements of the flight commander training program. OG/CC should tailor the program to meet individual unit requirements.

6.1.1. In-flight emergency (IFE) aircrews recovering to an RSU-controlled runway will switch to the RSU frequency according to local procedures.

6.1.2. At the first opportunity, units will notify the OG/CC of the situation and the radio frequency to be used in the aircraft recovery.

10.2. The primary SOF duty location for SUPT, ENJJPT, PIT (**EXCEPTION:** T-1 PIT), and fighter training is the tower. If the SOF is not in the primary duty location, he or she must be available to the OG/CC via handheld radio or cellular phone.

11.1.1. For the primary SOF positions located in the tower, the radio will have the capability to be recorded. The SOF will have the capability to monitor ground, tower, and guard frequencies.

11.1.2. In addition, all primary SOF locations will have telephone hot lines to the OG/CC, home field RSUs (if applicable), auxiliary field RSUs as specified in AETCI 11-204 (if applicable), base operations, and applicable air traffic control facilities (as determined by the OG/CC).

11.1.4. (Added)(AETC) At least one Class A telephone line.

11.1.5. (Added)(AETC) A handheld radio (brick).

11.2. The weather dissemination system must have the capability to access weather radar information and local weather products.

11.3. The SOF vehicle will also have a radio to monitor emergency aircraft.

11.6. Publications (AFI 11-2MDS-specific volume 3s and AFI 11-202, Volume 3, *General Flight Rules*) and aircraft technical orders for each type of aircraft flown in the wing or group will be available to the SOF. Additional requirements will be at the discretion of the OG/CC.

11.7. (Added)(AETC) A SOF information/read file will be maintained.

★13. Within AETC, the currency for SOF duty (including Reserve IPs) is 45 days.

13.1. (Added)(AETC) If 45 days pass without performance of SOF duty, the SOF will undergo refresher training to include a review of the appropriate publications and a 1-hour on-the-job training tour under the supervision of a current and qualified SOF.

13.1.1. (Added)(AETC) The training folder will reflect the reason for loss of currency and the date of requalification.

13.1.2. (Added)(AETC) Both the current and noncurrent SOF will log the tour.

13.2. (Added)(AETC) If 90 days pass without performance of SOF duties, the SOF will undergo refresher training to include a review of the appropriate publications; at least two, 2-hour OJT tours under the supervision of a current and qualified SOF; successful completion of a 25-question written test; and compliance with paragraphs 13.1.1 (Added)(AETC) and 13.1.2 (Added)(AETC).

13.3. (Added)(AETC) The squadron commander will review each instance of currency loss resulting in refresher training. The OG/CC will review and document the circumstances for individuals who exceed 60-day currency. If a SOF exceeds the 45-day currency requirements on two separate occasions, the OG/CC will review the circumstances to determine if removal from the SOF program is warranted.

14.1. Squadron commanders will nominate the minimum number of SOF candidates necessary to safely accomplish the mission. Letter of Xs will reflect this qualification.

14.4. All SOF candidates, regardless of previous experience or qualification, will complete the initial qualification syllabus outlined in this supplement. OG/CC waiver requests will be considered on a case-by-case basis.

14.5. An experienced SOF will supervise the candidate for a minimum of three, 3-hour periods to include an opening, midday, and closing tour. When practical, the SOF program manager will schedule two of the three tours with experienced SOFs from dissimilar base-assigned aircraft, as applicable. The OG/CC may certify the candidate to perform day-only SOF duties upon completing the third tour. The squadron Letter of Xs will be updated to reflect this restricted qualification. For night qualification, accomplish a fourth tour with a minimum of 1 hour and 30 minutes occurring after official sunset. Upon completion of the night tour, remove the day-only SOF restriction from the Letter of Xs.

14.5.7. (Added)(AETC) Procedures required during normal and emergency operations, such as status changes, weather recalls, changing weather conditions, opposite direction runway/barrier procedures, etc.

★14.6. When practical, training should include simulators and orientation flights in all base-assigned aircraft.

15.1. The SOF program manager will conduct quarterly SOF meetings and develop a process to ensure all absentees review meeting minutes before reporting to the tower for SOF duty.

17.1. The OG/CC will appoint, in writing, a SOF program manager at the OGV level as the SOF OPR (see paragraph 4.5 of this supplement for duties).

17.2.5. The SOF program manager will schedule and conduct quarterly SOF meetings. Attendees will include all SOFs, applicable air traffic control representatives, the chief of wing safety, a representative from base weather, the fire chief, and other members as determined by the OG/CC and outlined in the local supplement. The agenda will include a review of procedures and recent situations and emergencies. If available, the SOF program manager will use tapes of recent emergencies to stimulate discussion.

18. Do not supplement this paragraph to provide local procedures; instead, supplement the “functional” paragraphs that address the items listed. Forward unit supplements through stan/eval channels to HQ AETC/DOFV for review after publication.

19. The SOF program manager will maintain waivers for 1 year. At that time, the waiver expires or must be reissued by the OG/CC. Forward a copy of all waivers to 19 AF/DO and HQ AETC/DOFV.

**20. (Added)(AETC) Forms Adopted.** AF Form 847.

**NOTE: The following are added to Attachment 1:**

***References (Added)(AETC)***

AETCI 11-204, *Runway Supervisory Unit (RSU) Operations*

AFMAN 37-139, *Records Disposition Schedule*

***Abbreviations and Acronyms (Added)(AETC)***

**AHAS**—Avian Hazard Advisory System

**ARTCC**—Air Route Traffic Control Center

**ATIS**—Automatic Terminal Information Service

**BAM**—bird avoidance model

**ENJJPT**—Euro-NATO joint jet pilot training

**FTG**—flying training group

**IMSO**—international military student management officer

**ITS**—index of thermal stress

**JPPT**—joint primary pilot training

**PIT**—pilot instructor training

**SUPT**—specialized undergraduate pilot training

**TDY**—temporary duty

**TRG**—training group

A2.1. Include the following items to Table A2.1, basic publication:

A2.1.1. (Added)(AETC) Item Number 7. Also include “weather divert.”

A2.1.2. (Added)(AETC) Item Number 12. Also include “aircraft accountability.”

A2.1.3. (Added)(AETC) Item Number 14. Also include “precautionary landing (helicopter operations).

A2.1.4. (Added)(AETC) Item Number 25. (Added)(AETC) Electrical failure/alternate SOF contingency plan.

A2.1.5. (Added)(AETC) Item Number 26. (Added)(AETC) Chase aircraft procedures for aircraft emergencies (if applicable).

A2.1.6. (Added)(AETC) Item Number 27. (Added)(AETC) Search and rescue operations.

A4.1. During local flying, the command post will assist the SOF as necessary to coordinate emergency response and facilitate CONFERENCE HOTEL conference calls.

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Director of Operations

***4 Attachments (Added)(AETC)***

6. Index of Thermal Stress (ITS)
7. Chill Index
8. AETC SOF Telephone Numbers
9. Squadron Duty Desk Equipment List (Typical)



**Attachment 6 (Added)(AETC)****INDEX OF THERMAL STRESS (ITS)**

**A6.1. (Added)(AETC) Instructions.** Enter with local dry bulb temperature and dew point temperature. At intersection, read ITS value and zone (Figure A6.1 [Added][AETC] and Figure A6.2 [Added][AETC]). These figures apply only to lightweight flight clothing. The “X” denotes combinations above saturation temperature.

**A6.2. (Added)(AETC) Procedures.** Base weather determines the ITS zone. The SOF works the ITS zone applicability. Aircrew members have the responsibility to monitor their physical condition and not exceed their capability for safe mission accomplishment. These procedures are only the recommended limits of exposure. Wings are encouraged to develop additional restrictions if mission requirements allow.

**A6.2.1. (Added)(AETC) Caution Zone:**

A6.2.1.1. (Added)(AETC) Be alert for symptoms of heat stress.

A6.2.1.2. (Added)(AETC) Drink plenty of liquids (noncaffeinated).

A6.2.1.3. (Added)(AETC) Limit ground operations time to 90 minutes (time outside an air-conditioned environment).

**A6.2.2. (Added)(AETC) Danger Zone.** In addition to caution zone procedures:

A6.2.2.1. (Added)(AETC) Avoid exercise 4 hours prior to takeoff on pattern only or low-level sorties.

A6.2.2.2. (Added)(AETC) Minimum recovery time between flights is 2 hours (landing time to next takeoff time).

A6.2.2.3. (Added)(AETC) Limit ground operations to 45 minutes for fighter and trainer-type aircraft (time outside an air-conditioned environment). If exceeded, minimum recovery time is 1 hour. All others may continue operations when the provisions of paragraph 4.1.7 of this supplement are met.

A6.2.2.4. (Added)(AETC) When possible, wait in a cool, shaded area if the aircraft is not ready to fly.

A6.2.2.5. (Added)(AETC) Complete a maximum of two aircraft inspections (two exterior inspections on initial sorties and one exterior inspection on subsequent sorties for fighters and trainers).

A6.2.2.6. (Added)(AETC) SUPT solo students may accomplish only one exterior inspection per sortie.

Figure A6.1. (Added)(AETC) Index of Thermal Stress (Dewpoint -1 °C to 22 °C).

Dry Bulb Temp (°C)	Zone	Dewpoint (°C)																							
		-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
23	Normal	23	23	23	23	24	24	24	25	25	25	26	26	26	27	27	28	28	29	29	30	30	31	31	32
24		23	24	24	24	24	25	25	25	26	26	26	27	27	27	28	28	29	29	30	30	31	31	32	32
25		24	24	24	25	25	25	26	26	26	27	27	27	28	28	28	29	29	30	30	31	31	32	32	33
26		25	25	25	25	26	26	26	27	27	27	28	28	28	29	29	29	30	30	31	31	32	32	33	33
27		25	26	26	26	26	27	27	27	28	28	28	29	29	29	30	30	31	31	31	32	32	33	34	34
28		26	26	27	27	27	27	28	28	28	29	29	29	30	30	30	31	31	32	32	33	33	34	34	35
29		27	27	27	27	28	28	28	29	29	29	29	30	30	31	31	31	32	32	33	33	34	34	35	35
30		27	28	28	28	28	29	29	29	29	30	30	30	31	31	32	32	32	33	33	34	34	35	35	36
31		28	28	29	29	29	29	30	30	30	30	31	31	31	32	32	33	33	33	34	34	35	35	36	36
32		29	29	29	29	30	30	30	30	31	31	31	32	32	32	33	33	34	34	35	35	35	36	36	37
33		29	30	30	30	30	31	31	31	31	32	32	32	33	33	33	34	34	35	35	36	36	37	37	38
34		30	30	31	31	31	31	31	32	32	32	33	33	33	34	34	34	35	35	36	36	37	37	38	38
35		31	31	31	31	32	32	32	32	33	33	33	34	34	34	35	35	35	36	36	37	37	38	38	39
36		31	32	32	32	32	33	33	33	33	34	34	34	35	35	35	36	36	36	37	37	38	38	39	39
37		32	32	32	33	33	33	33	34	34	34	35	35	35	36	36	36	37	37	37	38	38	39	39	40
38	CAUTION	33	33	33	33	34	34	34	34	35	35	35	35	36	36	36	37	37	38	38	39	39	39	40	40
39		33	34	34	34	34	34	35	35	35	35	36	36	36	37	37	37	38	38	39	39	40	40	40	41
40		34	34	34	35	35	35	35	36	36	36	36	37	37	37	38	38	38	39	39	40	40	41	41	42
41		35	35	35	35	35	36	36	36	36	37	37	37	38	38	38	39	39	39	40	40	41	41	42	42
42		35	35	36	36	36	36	37	37	37	37	38	38	38	39	39	39	40	40	40	41	41	42	42	43
43		36	36	36	36	37	37	37	37	38	38	38	38	39	39	39	40	40	41	41	41	42	42	43	43
44		36	37	37	37	37	38	38	38	38	39	39	39	39	40	40	40	41	41	42	42	42	43	43	44
45		37	37	37	38	38	38	38	39	39	39	39	40	40	40	41	41	41	42	42	43	43	43	44	44
46		38	38	38	38	38	39	39	39	39	40	40	40	41	41	41	42	42	42	43	43	43	44	44	45

Figure A6.2. (Added)(AETC) Index of Thermal Stress (Dewpoint 23 °C to 46 °C).

Dry Bulb Temp (°C)	Zone	Dewpoint (°C)																							
		23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46
23	CAUTION	32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
24		33	33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
25		33	34	35	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
26		34	35	35	36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
27		35	35	36	36	37	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
28		35	36	36	37	38	38	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
29		36	36	37	38	38	39	39	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
30		36	37	38	38	39	39	40	41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
31		37	38	38	39	39	40	40	41	42	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
32		38	38	39	39	40	40	41	42	42	43	X	X	X	X	X	X	X	X	X	X	X	X	X	X
33	DANGER	38	39	39	40	40	41	42	42	43	43	44	X	X	X	X	X	X	X	X	X	X	X	X	X
34		39	39	40	40	41	41	42	43	43	44	45	45	X	X	X	X	X	X	X	X	X	X	X	X
35		39	40	40	41	41	42	43	43	44	45	45	46	46	X	X	X	X	X	X	X	X	X	X	X
36		40	40	41	41	42	43	43	44	44	45	46	46	47	48	X	X	X	X	X	X	X	X	X	X
37		40	41	41	42	43	43	44	44	45	46	46	47	47	48	49	X	X	X	X	X	X	X	X	X
38		41	41	42	42	43	44	44	45	45	46	47	47	48	49	49	50	X	X	X	X	X	X	X	X
39		41	42	42	43	44	44	45	45	46	47	47	48	49	49	50	51	51	X	X	X	X	X	X	X
40		42	43	43	44	44	45	45	46	46	47	48	48	49	50	50	51	52	52	X	X	X	X	X	X
41		43	43	44	44	45	45	46	46	47	48	48	49	50	50	51	52	52	53	54	X	X	X	X	X
42		43	44	44	45	45	46	46	47	48	48	49	49	50	51	51	52	53	53	54	55	X	X	X	X
43		44	44	45	45	46	46	47	47	48	49	49	50	51	51	52	52	53	54	55	55	56	X	X	X
44		44	45	45	46	46	47	47	48	49	49	50	50	51	52	52	53	54	54	55	56	56	57	X	X
45		45	45	46	46	47	47	48	48	49	50	50	51	52	52	53	53	54	55	55	56	57	58	58	X
46		45	46	46	47	47	48	48	49	50	50	51	51	52	53	53	54	55	55	56	57	57	58	59	60

**Attachment 7 (Added)(AETC)****CHILL INDEX**

★**A7.1. (Added)(AETC) Instructions.** Determine the sustained wind speed and temperature and enter into Figure A7.1. At the intersection, read the wind chill value and danger zone. The caution zone is determined as wind chill temperatures at or below freezing temperatures with a risk of frostbite; danger zone is determined at 30 minutes or less with a risk of frostbite (depending on the temperature).

★**A7.2. (Added)(AETC) Procedures.** Base weather determines the chill index. The SOF uses the chill index and determines applicability. Aircrew members have the responsibility to monitor their physical condition and not exceed their capability for safe mission accomplishment. These procedures are only recommended limits of exposure. Wings are encouraged to develop additional restrictions based on mission requirements.

**A7.2.1. (Added)(AETC) Caution Zone.** In this zone, wind chill temperatures are at or below freezing (32 °F or 0 °C).

A7.2.1.1. (Added)(AETC) Beware of stress due to cold temperatures.

A7.2.1.2. (Added)(AETC) Limit ground operations to 30 minutes for fighter and primary trainer-type aircraft (time outside a heated environment).

**A7.2.2. (Added)(AETC) Danger Zone (No Fly).** In this zone, wind chill temperatures are at or below -20 °F or -29 °C.

A7.2.2.1. Exposed flesh can freeze in 30 minutes or less.

A7.2.2.2. No flying is allowed for fighter and primary trainer-type aircraft.

**NOTE:** The OG/CC will ensure adequate means are employed to protect airlift, tanker, and special operations/rescue crewmembers from the adverse effects of temperature extremes when duty requires extended ground preparation.

★Figure A7.1. (Added)(AETC) Chill Index. (note)

				Temperature (°C)												
	Calm	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45	-50	-55	-60	-65
Wind Speed (knots)	5	2	-4	-10	-16	-22	-28	-34	-40	-46	-52	-58	-64	-70	-76	-82
	10	1	-6	-12	-18	-25	-31	-37	-44	-50	-56	-63	-69	-76	-82	-88
	15	0	-7	-13	-20	-27	-33	-40	-46	-53	-59	-66	-73	-79	-86	-92
	20	-1	-8	-14	-21	-28	-35	-41	-48	-55	-62	-68	-75	-82	-89	-95
	25	-2	-8	-15	-22	-29	-36	-43	-50	-57	-63	-70	-77	-84	-91	-98
	30	-2	-9	-16	-23	-30	-37	-44	-51	-58	-65	-72	-79	-86	-93	-100
	35	-3	-10	-17	-24	-31	-38	-45	-52	-59	-66	-73	-81	-88	-95	-102
	40	-3	-10	-17	-25	-32	-39	-46	-53	-60	-68	-75	-82	-89	-96	-103
	45	-3	-11	-18	-25	-32	-40	-47	-54	-61	-69	-76	-83	-90	-98	-105
	50	-4	-11	-18	-26	-33	-40	-48	-55	-62	-70	-77	-84	-91	-99	-106
	55	-4	-11	-19	-26	-34	-41	-48	-56	-63	-70	-78	-85	-93	-100	-107
	60	-4	-12	-19	-27	-34	-41	-49	-56	-64	-71	-79	-86	-94	-101	-108
	65	-5	-12	-20	-27	-35	-42	-50	-57	-65	-72	-80	-87	-95	-102	-110
70	-5	-12	-20	-27	-35	-43	-50	-58	-65	-73	-80	-88	-95	-103	-110	
75	-5	-13	-20	-28	-35	-43	-51	-58	-66	-73	-81	-89	-96	-104	-111	
Risk of frostbite within				30 minutes		10 minutes		5 minutes								

**NOTE:** Use this chart for winds from 15 foot anemometer height.

**Attachment 8 (Added)(AETC)****AETC SOF TELEPHONE NUMBERS**

**NOTE:** Figure A8.1 provides the SOF telephone numbers for AETC bases.

**★Figure A8.1. SOF Telephone Numbers.**

<b>Base</b>	<b>DSN Telephone Number</b>
Altus AFB OK	866-6313/6314
Columbus AFB MS	742-7639
Keesler AFB MS	597-0663
Kirtland AFB NM	246-9482
Laughlin AFB TX	732-5185
Little Rock AFB AR	731-5487
Luke AFB AZ	896-5454
Moody AFB GA	460-3981
Randolph AFB TX:	
East Runway	487-5739
West Runway	487-2395
Sheppard AFB TX	736-1802
Tyndall AFB FL	523-2430
Vance AFB OK	448-7688

**Attachment 9 (Added)(AETC)****SQUADRON DUTY DESK EQUIPMENT LIST (TYPICAL)**

**NOTE:** The following is a list of typical equipment available to the OG/CC to properly equip unit squadrons to support the SOF and/or the mission of the operations group. The OG/CC will detail, in the unit supplement, the equipment required at each squadron duty desk.

A9.1. (Added)(AETC) Radios, as appropriate (UHF, VHF, etc.), to allow the Ops Sup the capability to monitor emergency aircrew communications with the SOF, while also providing duty desk personnel a frequency for resolving routine aircrew difficulties with squadron aircraft and crews.

A9.2. (Added)(AETC) Telephone hot lines to the SOF, home field RSUs (as applicable), auxiliary RSU (as applicable), base operations, weather, and maintenance control (or equivalent).

A9.3. (Added)(AETC) At least one Class A telephone line.

A9.4. (Added)(AETC) Weather displays that have the capability to access weather radar information and local weather products.

A9.5. (Added)(AETC) Locally developed procedural and emergency checklists designed to support SOF actions.

A9.6. (Added)(AETC) Publications and aircraft technical orders for squadron aircraft (can be the squadron flight crew information file [FCIF] library).

A9.7. (Added)(AETC) Access to the secondary crash net.

A9.8. (Added)(AETC) Means of displaying airfield and pattern status, barrier position (if applicable), takeoff and landing data (except airlift, special operations/rescue, and tanker units), ITS and chill index, and any other information deemed necessary for mission accomplishment.

**Attachment 10 (Added)(AETC)****WING-LEVEL FLIGHT COMMANDER TRAINING PROGRAM**

**NOTE:** The following topics are mandatory for discussion in a flight commander training program. Wings will outline the specifics of their flight commander training program in their supplement to this publication.

**A10.1. (Added)(AETC) Command and Control.** The OG/CC (or designated representative) will outline the overarching principles of the flight commander's responsibilities as a commander, to include:

A10.1.1. (Added)(AETC) Chain of command for policy issues.

A10.1.2. (Added)(AETC) Skip echelon staffing.

**A10.2. (Added)(AETC) Safety.** The chief of wing safety (or equivalent) will explain the commander's role in mishap prevention including a mishap history and the supervisory view of causes and prevention, to include:

**A10.2.1. (Added)(AETC) Mishap History:**

A10.2.1.1. (Added)(AETC) Types and causes.

A10.2.1.2. (Added)(AETC) Operator factors.

**A10.2.2. (Added)(AETC) Aircrew Discipline.**

**A10.2.3. (Added)(AETC) Limited Use Reports.**

**A10.3. (Added)(AETC) Student Management.** The OG/CC (or designated representative) will outline the flight commander's responsibilities regarding all phases of student management, to include:

**A10.3.1. (Added)(AETC) Syllabus Management:**

A10.3.1.1. (Added)(AETC) Scheduling.

A10.3.1.2. (Added)(AETC) Student airsickness and manifestation of apprehension.

A10.3.1.3. (Added)(AETC) Drop on request.

A10.3.1.4. (Added)(AETC) End-of-phase assessment.

A10.3.1.5. (Added)(AETC) End-of-course critiques.

**A10.3.2. (Added)(AETC) Commander's Awareness Program and Special Monitoring Status (ENJJPT):**

A10.3.2.1. (Added)(AETC) Philosophy and standardization.

A10.3.2.2. (Added)(AETC) Placement and removal.

A10.3.2.3. (Added)(AETC) Counseling.

**A10.3.3. (Added)(AETC) Commander's Quality Review Process (SUPT only):**

A10.3.3.1. (Added)(AETC) Progress and elimination flight evaluation philosophy.

A10.3.3.2. (Added)(AETC) Commander's review.

**A10.3.4. (Added)(AETC) Merit Assignment Selection System (SUPT only):**

A10.3.4.1. (Added)(AETC) Flight commander ranking.



A10.3.4.2. (Added)(AETC) Calculations and methodology.

**A10.4. (Added)(AETC) RSU Program and Responsibilities (if applicable).** The OG/CC (or designated representative) will discuss the role of the RSU in daily training and supervision, to include:

A10.4.1. (Added)(AETC) Purpose of the RSU program.

A10.4.2. (Added)(AETC) Selection of controllers and observers.

A10.4.3. (Added)(AETC) Philosophy on traffic pattern operations.

**A10.5. (Added)(AETC) SOF Program.** The OG/CC (or designated representative) will discuss the responsibilities of the SOF. This includes being:

A10.5.1. (Added)(AETC) The OG/CC designated representative.

A10.5.2. (Added)(AETC) Primarily responsible for safe conduct of the daily flying operation.

**A10.6. (Added)(AETC) International Military Student Management Officer (IMSO).** The IMSO will discuss the role of the flight commander in relation to international student training to include the lines of communication between the students, their country, and AETC. This includes:

A10.6.1. (Added)(AETC) International student entries and their cultures.

A10.6.2. (Added)(AETC) Air Force Security Assistance Training program.

A10.6.3. (Added)(AETC) Special activities for international students.

**A10.7. (Added)(AETC) Group Stan/Eval.** The OG/CC (or designated representative) will discuss the group stan/eval functions, to include:

**A10.7.1. (Added)(AETC) Flight Evaluations:**

A10.7.1.1. (Added)(AETC) AETC stan/eval program (AFI 11-202, Volume 2/AETC Sup 1, *Aircrew Standardization/Evaluation Program*).

A10.7.1.2. (Added)(AETC) Periodic flight evaluations.

A10.7.1.3. (Added)(AETC) AETC FCIF program.

A10.7.1.4. (Added)(AETC) Trend analysis.

**A10.7.2. (Added)(AETC) Inspections:**

A10.7.2.1. (Added)(AETC) Local, 19 AF, and HQ AETC inspection cycles.

A10.7.2.2. (Added)(AETC) Self-inspection program.

**A10.8. (Added)(AETC) Officer Development.** A flying squadron commander will discuss the flight commander's role in the military leadership of subordinates, to include:

**A10.8.1. (Added)(AETC) Flight Commander Responsibilities:**

A10.8.1.1. (Added)(AETC) Officer and enlisted performance reports and promotion recommendation forms.

A10.8.1.2. (Added)(AETC) Air Force and AETC guidance for dress and personal appearance.

A10.8.1.3. (Added)(AETC) The Air Force weight and fitness programs.

A10.8.1.4. (Added)(AETC) Alcohol in the squadron.

**A10.8.2. (Added)(AETC) Officer Professional Development:**

A10.8.2.1. **(Added)(AETC)** Professional conduct and relationships.

A10.8.2.2. (Added)(AETC) Officer and enlisted relationships.

A10.8.2.3. (Added)(AETC) Instructor and student relationships.

A10.8.2.4. (Added)(AETC) Career counseling.

**A10.8.3. (Added)(AETC) Chain of Command:**

A10.8.3.1. (Added)(AETC) Roles of the squadron commander and the operations officer.

A10.8.3.2. (Added)(AETC) Relationship to the group, wing, numbered air force, and HQ AETC.

A10.8.3.3. (Added)(AETC) Lines of communication up and down the chain.

A10.8.3.4. (Added)(AETC) Flight commander role in punitive and administrative actions.

**A10.9. (Added)(AETC) Aircraft and Maintenance Utilization.** The OG/CC (or designated representative) and the maintenance authority will discuss aircraft utilization, to include:

**A10.9.1. (Added)(AETC) Operations and Maintenance Interaction.**

**A10.9.2. (Added)(AETC) Wing Scheduling Plan:**

A10.9.2.1. (Added)(AETC) Utilization rates.

A10.9.2.2. (Added)(AETC) Average sortie durations.

**A10.9.3. (Added)(AETC) Scheduling Process.**

**A10.10. (Added)(AETC) Support Issues.** The support group commander (or designated representative) (if applicable) will explain the relationship of the flight commander to other base agencies, to include:

**A10.10.1. (Added)(AETC) Functions of the Support Group:**

A10.10.1.1. (Added)(AETC) Civil engineering.

A10.10.1.2. (Added)(AETC) Communications.

A10.10.1.3. (Added)(AETC) Facilities maintenance.

A10.10.1.4. (Added)(AETC) Social actions.

A10.10.1.5. (Added)(AETC) Morale, welfare, and recreation and services.

A10.10.1.6. (Added)(AETC) Civilian and military personnel.

**A10.10.2. (Added)(AETC) Security Forces:**

A10.10.2.1. (Added)(AETC) Relationship with civil authorities.

A10.10.2.2. (Added)(AETC) Policies on driving while intoxicated or while under the influence.

**A10.10.3. (Added)(AETC) Logistics Group:**

A10.10.3.1. (Added)(AETC) Supply.

A10.10.3.2. (Added)(AETC) Individual equipment.

A10.10.3.3. (Added)(AETC) Office supplies and equipment.

A10.10.3.4. (Added)(AETC) Transportation.

**A10.11. (Added)(AETC) Medical Issues.** A flight surgeon and aerospace physiology officer will

discuss the role of the medical and physiological functions of the wing, to include:

A10.11.1. (Added)(AETC) Scheduling physicals and physiological training.

A10.11.2. (Added)(AETC) Duties not to include flying (DNIF) policies.

**A10.12. (Added)(AETC) Legal Aspects of Command.** A representative from the legal office will outline commander responsibilities and options according to applicable military and civilian instructions, to include:

**A10.12.1. (Added)(AETC) Uniform Code of Military Justice.**

**A10.12.2. (Added)(AETC) Commander Options:**

A10.12.2.1. (Added)(AETC) Administrative:

A10.12.2.1.1. (Added)(AETC) Letter of reprimand.

A10.12.2.1.2. (Added)(AETC) Counseling.

A10.12.2.2. (Added)(AETC) Punitive:

A10.12.2.2.1. (Added)(AETC) Article 15.

A10.12.2.2.2. (Added)(AETC) Court martial.

A10.12.2.3. (Added)(AETC) Drug and alcohol abuse.

A10.12.2.4. (Added)(AETC) Policy and objectives.

A10.12.2.5. (Added)(AETC) Drug testing program.

**A10.12.3. (Added)(AETC) Equal Opportunity and Treatment.**

**A10.12.4. (Added)(AETC) Loss or Damage of Government Property and Report of Survey.**

**A10.12.5. (Added)(AETC) Authorized Fundraising Activities.**

**A10.13. (Added)(AETC) Wing and Group Commander Topics.**